APS 8-9-93

```
s feline immunodeficiency virus
            578 FELINE
           1117 IMMUNODEFICIENCY
           8074 VIRUS
L2            9 FELINE IMMUNODEFICIENCY VIRUS
                (FELINE(W)IMMUNODEFICIENCY(W)VIRUS)

=> s feline t lymphotropic virus
            578 FELINE
         362985 T
            241 LYMPHOTROPIC
           8074 VIRUS
L3            2 FELINE T LYMPHOTROPIC VIRUS
                (FELINE(W)T  LYMPHOTROPIC(W)VIRUS)

=> s feline t lymphotropic lentivirus
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Medline
8-9-93

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) s feline immunodeficiency virus or fiv
         4993 "FELINE"
        48281 "IMMUNODEFICIENCY"
       168352 "VIRUS"
          253 FELINE IMMUNODEFICIENCY VIRUS
                ("FELINE"(W)"IMMUNODEFICIENCY"(W)"VIRUS")
          241 FIV
1         316 FELINE IMMUNODEFICIENCY VIRUS OR FIV

) s feline t lymphotropic virus
         4993 "FELINE"
      1616737 "T"
         1879 "LYMPHOTROPIC"
       168352 "VIRUS"
2           2 FELINE T LYMPHOTROPIC VIRUS
                ("FELINE"(W)"T"(W)"LYMPHOTROPIC"(W)"VIRUS")

) s feline t lymphotropic lentivirus
         4993 "FELINE"
      1616737 "T"
         1879 "LYMPHOTROPIC"
          411 "LENTIVIRUS"
3          12 FELINE T LYMPHOTROPIC LENTIVIRUS
                ("FELINE"(W)"T"(W)"LYMPHOTROPIC"(W)"LENTIVIRUS")

) s l1 or l2 or l3
4         324 L1 OR L2 OR L3

) s l4 and vaccine
        34226 VACCINE
5          20 L4 AND VACCINE

) d ti,1-20

5   ANSWER 1 OF 20  COPYRIGHT 1993 NLM
[  Passive antibody protection of cats against   ***feline***
   ***immunodeficiency***     ***virus***   infection.

5   ANSWER 2 OF 20  COPYRIGHT 1993 NLM
[  Tumor necrosis factor alpha levels in cats experimentally infected
   with   ***feline***     ***immunodeficiency***     ***virus***  :
   effects of immunization and feline leukemia virus infection.

5   ANSWER 3 OF 20  COPYRIGHT 1993 NLM
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5 ANSWER 4 OF 20 COPYRIGHT 1993 NLM
I Immunization-induced decrease of the CD4+:CD8+ ratio in cats experimentally infected with ***feline*** ***immunodeficiency*** ***virus*** .

5 ANSWER 5 OF 20 COPYRIGHT 1993 NLM
I Enhancement after ***feline*** ***immunodeficiency*** ***virus*** vaccination.

5 ANSWER 6 OF 20 COPYRIGHT 1993 NLM
I Structure and variations of ***feline*** ***immunodeficiency*** ***virus*** envelope glycoproteins.

5 ANSWER 7 OF 20 COPYRIGHT 1993 NLM
I SIV and ***FIV*** ***vaccine*** studies at UC Davis: 1991 update.

5 ANSWER 8 OF 20 COPYRIGHT 1993 NLM
I Experimental ***vaccine*** protection against homologous and heterologous strains of ***feline*** ***immunodeficiency*** ***virus*** .

5 ANSWER 9 OF 20 COPYRIGHT 1993 NLM
I [The effectiveness of paramunization for the control of feline coryza]
Untersuchungen uber die Wirksamkeit der Paramunisierung zur Bekampfung des Katzenschnupfens.

5 ANSWER 10 OF 20 COPYRIGHT 1993 NLM
I Immunologic responses in healthy random-source cats fed N,N-dimethylglycine-supplemented diets.

5 ANSWER 11 OF 20 COPYRIGHT 1993 NLM
I Major core proteins, p24s, of human, simian, and feline immunodeficiency viruses are partly expressed on the surface of the virus-infected cells.

5 ANSWER 12 OF 20 COPYRIGHT 1993 NLM
I Vaccination of cats experimentally infected with ***feline*** ***immunodeficiency*** ***virus*** , using a recombinant feline leukemia virus ***vaccine*** .

5 ANSWER 13 OF 20 COPYRIGHT 1993 NLM
I Toward vaccination against feline leukemia virus and ***feline*** ***immunodeficiency*** ***virus*** infections.

5 ANSWER 14 OF 20 COPYRIGHT 1993 NLM
I Panel report on the colloquium on feline leukemia virus/ ***feline*** ***immunodeficiency*** ***virus*** : tests and vaccination.

5 ANSWER 15 OF 20 COPYRIGHT 1993 NLM
I Colloquium on feline leukemia virus/ ***feline*** ***immunodeficiency*** ***virus*** : tests and vaccination. Orlando, Florida, March 1-3, 1991.

5 ANSWER 16 OF 20 COPYRIGHT 1993 NLM
I Experimental ***vaccine*** protection against ***feline*** ***immunodeficiency*** ***virus*** .

5 ANSWER 17 OF 20 COPYRIGHT 1993 NLM
I Simian and feline immuno[illegible]iciency viruses: animal l[illegible]tivirus models for evaluation of AIDS vaccines and antiviral agents.

ANSWER 18 OF 20 COPYRIGHT 1993 NLM
Development of IL-2-independent feline lymphoid cell lines chronically infected with ***feline*** ***immunodeficiency*** ***virus*** : importance for diagnostic reagents and vaccines.

ANSWER 19 OF 20 COPYRIGHT 1993 NLM
[Primates as a model for the study of lentiviruses and AIDS] Les primates comme mod`eles d'etude des lentivirus et du SIDA.

ANSWER 20 OF 20 COPYRIGHT 1993 NLM
Molecular cloning of ***feline*** ***immunodeficiency*** ***virus*** .

d bib,ab,1-20

ANSWER 1 OF 20 COPYRIGHT 1993 NLM
93188187 MEDLINE
Passive antibody protection of cats against ***feline*** ***immunodeficiency*** ***virus*** infection.
Hohdatsu T; Pu R; Torres BA; Trujillo S; Gardner MB; Yamamoto JK
Department of Medicine, School of Veterinary Medicine, University of California, Davis 95616.
CA-39016 (NCI)
AI30904 (NIAID)
AI27732 (NIAID)
J Virol, (1993 Apr) 67 (4) 2344-8
Journal code: KCV ISSN: 0022-538X
United States (Z1.107.567.875.)
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals; Cancer Journals
9306
All six cats passively immunized with sera from either ***feline*** ***immunodeficiency*** ***virus*** (***FIV***)-vaccinated cats or cats infected with ***FIV*** (Petaluma strain) were protected from homologous ***FIV*** infection at a challenge dose that infected all six control cats. Passive immunization with sera from cats vaccinated with uninfected allogeneic T cells used to grow the ***vaccine*** virus did not protect either of two cats against the same ***FIV*** challenge. These results suggest that antiviral humoral immunity, perhaps in synergy with anticellular antibodies, may be responsible for previously reported ***vaccine*** protection.

ANSWER 2 OF 20 COPYRIGHT 1993 NLM
93158187 MEDLINE
Tumor necrosis factor alpha levels in cats experimentally infected with ***feline*** ***immunodeficiency*** ***virus*** : effects of immunization and feline leukemia virus infection.
Lehmann R; Joller H; Haagmans BL; Lutz H
Department of Veterinary Medicine, University of Zurich, Switzerland.)
Vet Immunol Immunopathol, (1992 Dec) 35 (1-2) 61-9
Journal code: XCB ISSN: 0165-2427
Netherlands (Z1.542.651.)
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals
9305
Tumor necrosis factor alpha (TNF alpha) levels were determined by enzyme-linked immunosorbent assay (ELISA) and by cell culture bioassay in supernatants of lipopolysaccharide-stimulated feline monocyte cultures and in cat serum samples. There was a good correlation between the results obtained by the two methods. From the fact that TNF alpha was neutralized quantitatively by antibodies to human TNF alpha in feline

with human TNF alpha and that the human TNF alpha ELISA can be used to quantitate feline TNF alpha. During the first 6 months after experimental ***feline*** ***immunodeficiency*** ***virus*** (***FIV***) infection no differences in serum TNF alpha values were observed between infected and non-infected cats. TNF alpha levels increased significantly after primary vaccination with a feline leukemia virus (FeLV) ***vaccine*** in ***FIV*** infected cats over those in the non-infected controls. During secondary immune response TNF alpha levels rose transiently for a period of a few days in both the ***FIV*** positive and the ***FIV*** negative cats. After FeLV challenge, TNF alpha levels increased in all animals challenged with virulent FeLV for a period of 3 weeks. This period corresponded to the time necessary to develop persistent FeLV viremia in the control cats. It was concluded from these experiments that in the asymptomatic phase of ***FIV*** infection no increased levels of TNF alpha are present, similar to the situation in asymptomatic HIV infected humans. Activation of monocytes/macrophages in ***FIV*** infected cats by stimuli such as vaccination or FeLV challenge readily leads to increased levels of TNF alpha.

.5 ANSWER 3 OF 20 COPYRIGHT 1993 NLM
IN 93158182 MEDLINE
'I Retrovirus infections in non-domestic felids: serological studies and attempts to isolate a lentivirus.
IU Lutz H; Isenbugel E; Lehmann R; Sabapara RH; Wolfensberger C
:S Department of Veterinary Medicine, University of Zurich, Switzerland.)
:O Vet Immunol Immunopathol, (1992 Dec) 35 (1-2) 215-24
Journal code: XCB ISSN: 0165-2427
:Y Netherlands (Z1.542.651.)
'T Journal; Article; (JOURNAL ARTICLE)
A English
'S Priority Journals
'M 9305
'B An African lioness from the Zoo of Zurich had to be euthanized because of an inoperable tumor. The serum tested negative for feline leukemia virus (FeLV) p27 antigen by enzyme-linked immunosorbent assay (ELISA) but was strongly positive for ***feline*** ***immunodeficiency*** ***virus*** (***FIV***) antibodies by ELISA and Western blot. When her only offspring and mate were tested for ***FIV*** , high antibody titers to ***FIV*** were also found in their serum. Lymphocytes were prepared from these two lions on different occasions and co-cultivated with specific pathogen free (SPF) cat lymphocytes in the presence of concanavalin A and recombinant human interleukin-2 (IL-2) for 6 weeks. The cell culture supernatants tested negative for Mg(2+)-dependent reverse transcriptase and ***FIV*** p24 by a double antibody sandwich ELISA throughout the culture period. Whole blood and buffy coat cells collected from these two lions were transmitted by intraperitoneal injection into two SPF cats. The two cats did not seroconvert for a period of 11 months nor could reverse transcriptase activity and ***FIV*** p24 antigen be demonstrated in the supernatant of several lymphocyte cultures. To determine the importance of lentivirus infections in zoo-kept wild felids, 124 serum samples were obtained from African lions, Indian and Siberian tigers, snow leopards, panthers, cheetahs and other wild cats from nine European zoos. In addition, serum samples collected from 12 Asiatic lions originating from Gir forest in the Indian State of Gujarat were included in this study. The sera were tested for antibodies to ***FIV*** , FeLV and feline syncytium-forming virus (FeSFV) by ELISA and Western blot using the respective viruses after gradient purification. In addition, some of the sera were also tested for antibodies to equine infectious anemia virus (EIAV) and Visna-Maedi virus (VMV). Antibodies to ***FIV*** were found in 32/57 (57%) of the

lions, one of 10 tigers and one of four panthers. All other sera including those collected from the 12 Asiatic lions were negative for ***FIV*** antibodies. One of the ***FIV*** positive lion sera had high antibody titers producing strong bands on Western blot strips even in dilutions of)) 1:1000. The Western blot pattern of the lion sera differed from that of domestic cats in that primarily p24 and to a lesser degree p17 was recognized. Antibodies to FeSFV were found in 14 animals (seven with strong, seven with intermediate, reaction). No correlation was found between ***FIV*** and FeSFV infection. Antibodies to FeLV were found in two cheetahs which later turned out to have been vaccinated with Leukocell, a FeLV ***vaccine*** .(ABSTRACT TRUNCATED AT 400 WORDS)

.5 ANSWER 4 OF 20 COPYRIGHT 1993 NLM
IN 93158181 MEDLINE
I Immunization-induced decrease of the CD4+:CD8+ ratio in cats experimentally infected with ***feline*** ***immunodeficiency*** ***virus*** .
U Lehmann R; von Beust B; Niederer E; Condrau MA; Fierz W; Aubert A; Ackley CD; Cooper MD; Tompkins MB; Lutz H
S Department of Veterinary Medicine, University of Zurich, Switzerland.)
O Vet Immunol Immunopathol, (1992 Dec) 35 (1-2) 199-214
Journal code: XCB ISSN: 0165-2427
Y Netherlands (Z1.542.651.)
T Journal; Article; (JOURNAL ARTICLE)
A English
S Priority Journals
M 9305
B In a previous experiment a group of 15 specified pathogen free (SPF) cats were experimentally infected with a Swiss isolate of ***feline*** ***immunodeficiency*** ***virus*** (***FIV***). A group of 15 SPF cats served as ***FIV*** negative controls. Nine cats of each group were vaccinated with a recombinant feline leukemia virus (FeLV) ***vaccine*** , six cats in each group with a placebo ***vaccine*** . All vaccinated cats developed high antibody titers to FeLV and were protected against subsequent FeLV challenge infection. In both control groups five of six cats became persistently infected with FeLV. Unexpectedly, the primary immune response to the ***vaccine*** antigen was significantly higher in the ***FIV*** positive group than in the ***FIV*** negative. The secondary response was stronger in the ***FIV*** negative cats. The goal of the present investigation was to further study the immune response in these 30 cats. They were immunized twice with the synthetic peptide L-tyrosine-L-glutamic acid-poly(DL-alanine)-poly(L-lysine) (TGAL) 21 days apart. Blood samples were collected on four occasions during the immunization process. They were tested for antibodies to TGAL, complete blood cell counts and CD4+, CD8+ and pan-T-lymphocyte counts. The following observations were made: (1) in contrast to the FeLV ***vaccine*** experiment, the primary immune response to TGAL was not significantly stronger in the ***FIV*** positive cats when tested by enzyme-linked immunosorbent assay (2). The absolute size of the CD4+ lymphocyte population was distinctly smaller in the ***FIV*** positive than in the ***FIV*** negative cats. The lowest CD4+ values were found in the dually ***FIV*** /FeLV infected cats. (3) A population of CD8+ lymphocytes was identified that was characterized by a distinctly weaker fluorescence. The size of this population increased in ***FIV*** positive and decreased in ***FIV*** negative cats during the TGAL immunization experiment. (4) The CD4+:CD8+ ratio increased in ***FIV*** negative cats during TGAL immunization from 1.9 to 2.3. In contrast, in ***FIV*** positive animals the CD4+:CD8+ ratio decreased significantly from 1.9 to 1.3 during the same period. From these and earlier data it was concluded that in short-term ***FIV*** infection the immune response to T-cell

significant drop of the CD4+:CD8+ ratio over a 5 week immunization period suggests that antigenic stimulation may accelerate the development of immune suppression in ***FIV*** positive cats. If this is a general feature, ***FIV*** infection may provide a particularly interesting model for studying the pathogenesis of AIDS.

ANSWER 5 OF 20 COPYRIGHT 1993 NLM
93158180 MEDLINE
Enhancement after ***feline*** ***immunodeficiency*** ***virus*** vaccination.
Hosie MJ; Osborne R; Reid G; Neil JC; Jarrett O
University of Glasgow, Department of Veterinary Pathology, UK.)
Vet Immunol Immunopathol, (1992 Dec) 35 (1-2) 191-7
Journal code: XCB ISSN: 0165-2427
Netherlands (Z1.542.651.)
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals
9305
Cats were vaccinated with one of the three preparations: purified ***feline*** ***immunodeficiency*** ***virus*** (***FIV***) incorporated into immune stimulating complexes (ISCOMs), recombinant ***FIV*** p24 ISCOMs, or a fixed, inactivated cell ***vaccine*** in quil A. Cats inoculated with the ***FIV*** ISCOMs or the recombinant p24 ISCOMs developed high titres of antibodies against the core protein p24 but had no detectable antibodies against the env protein gp120 or virus neutralising antibodies. In contrast, all of the cats inoculated with the fixed, inactivated cell ***vaccine*** developed anti-env antibodies and four of five had detectable levels of neutralising antibody. However, none of the vaccinated cats were protected from infection after intraperitoneal challenge with 20 infectious units of ***FIV*** . Indeed there appeared to be enhancement of infection after vaccination as the vaccinated cats become viraemic sooner than the unvaccinated controls, and 100% of the vaccinated cats became viraemic compared with 78% of the controls. The mechanism responsible for this enhancement remains unknown.

ANSWER 6 OF 20 COPYRIGHT 1993 NLM
93134811 MEDLINE
Structure and variations of ***feline*** ***immunodeficiency*** ***virus*** envelope glycoproteins.
Pancino G; Fossati I; Chappey C; Castelot S; Hurtrel B; Moraillon A; Klatzmann D; Sonigo P
Institut Cochin de Genetique Moleculaire (ICGM-CNRS UPR 0415), Paris, France.)
Virology, (1993 Feb) 192 (2) 659-62
Journal code: XEA ISSN: 0042-6822
United States (Z1.107.567.875.)
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals; Cancer Journals
EMBL-L06311; GENBANK-L06311; EMBL-L06312; GENBANK-L06312
9304
We report the characterization of the env gene of a ***feline*** ***immunodeficiency*** ***virus*** isolate from France (***FIV*** Wo). ***FIV*** Wo gag and env genes were cloned directly from cat peripheral blood mononuclear cells, using polymerase chain reaction. The env molecular clone was shown to be functional and to express antigenically relevant envelope glycoproteins in vitro. Alignment of ***FIV*** Wo sequences with available ***FIV*** sequences and application of a regionalization algorithm resulted in delineation of variable and conserved domains of ***FIV*** Env. These data were used to build

the Env molecular clone, variability map, and structural model constitute helpful tools for future studies of ***FIV*** envelope aimed at the determination of structure-function relationships or design of diagnostics or ***vaccine*** reagents.

ANSWER 7 OF 20 COPYRIGHT 1993 NLM
93103851 MEDLINE
SIV and ***FIV*** ***vaccine*** studies at UC Davis: 1991 update.
Gardner M; Yamamoto J; Marthas M; Miller C; Jennings M; Rosenthal A; Luciw P; Planelles V; Yilma T; Giavedoni L; et al
Department of Medical Pathology, University of California, Davis.)
AIDS Res Hum Retroviruses, (1992 Aug) 8 (8) 1495-8 Ref: 19
Journal code: ART ISSN: 0889-2229
United States (Z1.107.567.875.)
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
English
Priority Journals
9303

ANSWER 8 OF 20 COPYRIGHT 1993 NLM
93100852 MEDLINE
Experimental ***vaccine*** protection against homologous and heterologous strains of ***feline*** ***immunodeficiency*** ***virus*** .
Yamamoto JK; Hohdatsu T; Olmsted RA; Pu R; Louie H; Zochlinski HA; Acevedo V; Johnson HM; Soulds GA; Gardner MB
Department of Medicine, School of Veterinary Medicine, University of California, Davis 95616.
CA-39016 (NCI)
AI30904 (NIAID)
AI27732 (NIAID)
J Virol, (1993 Jan) 67 (1) 601-5
Journal code: KCV ISSN: 0022-538X
United States (Z1.107.567.875.)
(CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals; Cancer Journals
9303
More than 90% of cats immunized with inactivated whole infected-cell or cell-free ***feline*** ***immunodeficiency*** ***virus*** (***FIV***) vaccines were protected against intraperitoneal infection with 10 50% animal infectious doses of either homologous ***FIV*** Petaluma (28 of 30 cats) or heterologous ***FIV*** Dixon strain (27 of 28 cats). All 15 control cats were readily infected with either strain of ***FIV*** . Protection appears to correlate with antiviral envelope antibody levels by a mechanism yet to be determined.

ANSWER 9 OF 20 COPYRIGHT 1993 NLM
92398661 MEDLINE
[The effectiveness of paramunization for the control of feline coryza]
Untersuchungen uber die Wirksamkeit der Paramunisierung zur Bekampfung des Katzenschnupfens.
Klimentowski S; Kolbl S; Fischer M
Bundesanstalt fur Virusseuchenbekampfung, Haustieren Wien-Hetzendorf.)
Berl Munch Tierarztl Wochenschr, (1992 Aug 1) 105 (8) 253-9
Journal code: 9Q8 ISSN: 0005-9366
Germany (Z1.542.315.)
Journal; Article; (JOURNAL ARTICLE)

20 cats in a cat home were treated prophylactically and therapeutically with Baypamun HK. The animals were allocated into three groups as described. 7 freshly admitted clinically healthy cats were treated prophylactically on day 1, 2 and 9 with 1 ml Baypamun HK (group I). 7 cats, who already were allocated for one year in the home and were sick of the feline respiratory disease complex were treated as described for group I (group II). 6 further cats, who also showed symptoms of the feline respiratory disease complex and had stayed for one year in the home were treated with physiol.saline solution according to group I (group III). From all cats blood samples were taken at day 1, 3, 10 and 17. The blood samples were checked for antibodies against feline calicivirus (FCV), feline herpesvirus (FHV), panleukopenia virus (PLV), feline peritonitis virus (FIPV) and ***feline*** ***immunodeficiency*** ***virus*** (***FIV***). Also the occurrence of the feline leukemia virus (FeLV) was evaluated. The cellular immunity was evaluated by means of the lymphocyte transformations test (LTT), nitroblue-tetrazolium reduction test (NBT) and cytochrome C-reduction test (CRT). Mean value and standard deviation was calculated from the results. The significance was determined by the t-test. The animals were examined clinically daily for 20 days for the feline respiratory disease complex. When necessary, the animals were treated by homeopathic and antibiotic products. At the time of admission to the home all cats were or had been treated with an attenuated panleukopenia ***vaccine*** . The serologic parameters were not influenced in the cats of group I.(ABSTRACT TRUNCATED AT 250 WORDS)

ANSWER 10 OF 20 COPYRIGHT 1993 NLM

92398180 MEDLINE

Immunologic responses in healthy random-source cats fed N,N-dimethylglycine-supplemented diets.

Weiss RC

Department of Pathobiology, College of Veterinary Medicine, Auburn University, AL 36849.)

Am J Vet Res, (1992 May) 53 (5) 829-33

Journal code: 40C ISSN: 0002-9645

United States (Z1.107.567.875.)

Journal; Article; (JOURNAL ARTICLE)

English

Priority Journals

9212

The immunomodulatory capacities of N,N-dimethylglycine (DMG) were examined in random-source cats. Blood mononuclear leukocytes of healthy adult cats that had negative results to tests for FeLV and ***feline*** ***immunodeficiency*** ***virus*** were exposed in vitro to various concentrations of DMG (10 to 1,000 micrograms/ml) and were evaluated for proliferative responses to T- or B-cell phytomitogens. Although increased, mean lymphocyte blastogenic responses to phytolectins in DMG-treated cultures did not differ significantly from responses of untreated cultures. For in vivo studies, cats were given a solution containing either 100 mg of DMG or a control solution without DMG orally at 8 AM and 6 PM for 40 consecutive days. On post-treatment day 24 and 25, mean blastogenic responses to phytolectins in DMG-treated and control cats inoculated 10 days earlier with an inactivated feline virus ***vaccine*** were similar. Cats given DMG and inoculated twice in a 3-week interval with a commercial ***vaccine*** containing inactivated feline herpesvirus-1 and feline calicivirus had significantly (P = 0.045) lower virus neutralizing serum antibody titers against feline herpesvirus-1, compared with titers of control cats, whereas feline calicivirus titers were similar in both groups. On day 25, mean serum interferon activity, induced after IV inoculation of Newcastle disease virus, was signi antly (P = 0.021) lower i the DMG-treated cats. Results of this study of DMG in healthy cats failed to demonstrate enhancement of either specific

ANSWER 11 OF 20 COPYRIGHT 1993 NLM
92397580 MEDLINE
Major core proteins, p24s, of human, simian, and feline immunodeficiency viruses are partly expressed on the surface of the virus-infected cells.
Nishino Y; Ohki K; Kimura T; Morikawa S; Mikami T; Ikuta K
Section of Serology, Hokkaido University, Sapporo, Japan.)
Vaccine, (1992) 10 (10) 677-83
Journal code: X60 ISSN: 0264-410X
England: United Kingdom (Z1.542.363.300.)
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals
9212
We have previously shown the expression of human immunodeficiency virus type 1 (HIV-1) major gag protein, p24, on the surface of persistently HIV-1-infected cells by using murine monoclonal antibodies (mAb). We now report that the cell surface gag p24 antigen expression is a universal phenomenon among HIV-1, simian immunodeficiency virus (SIV), and ***feline*** ***immunodeficiency*** ***virus*** (***FIV***). The mAbs prepared by immunization with purified HIV-1 particles were used as antibodies cross-reactive to HIV-1 and SIVagmp24 antigens. The mAbs to ***FIV*** p24 were raised against the gag precursor 50 kDa protein of ***FIV*** , which was expressed by Baculovirus vector. The p24 antigen expression on the cell surface was detectable in certain combinations of virus-host cell systems in all of these viruses. Since these p24 regions of the animal viruses seem to play as important a role in cell-mediated immunity as that of HIV-1, the p24 applicability as a candidate epitope for ***vaccine*** development could be evaluated in those animals.

ANSWER 12 OF 20 COPYRIGHT 1993 NLM
92193096 MEDLINE
Vaccination of cats experimentally infected with ***feline*** ***immunodeficiency*** ***virus*** , using a recombinant feline leukemia virus ***vaccine*** .
Lehmann R; Franchini M; Aubert A; Wolfensberger C; Cronier J; Lutz H
Department of Medicine, School of Veterinary Medicine, University of Zurich, Switzerland.)
J Am Vet Med Assoc, (1991 Nov 15) 199 (10) 1446-52
Journal code: HAV ISSN: 0003-1488
United States (Z1.107.567.875.)
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals
9206
A group of 15 cats experimentally infected with a Swiss isolate of ***feline*** ***immunodeficiency*** ***virus*** (***FIV***) and a group of 15 ***FIV*** -negative control cats were inoculated with an FeLV ***vaccine*** containing recombinant FeLV-envelope. High ELISA antibody titer developed after vaccination in ***FIV*** -positive and ***FIV*** -negative cats. Vaccinated and nonvaccinated controls were later challenge exposed by intraperitoneal administration of virulent FeLV subtype A (Glasgow). Although 12 of 12 nonvaccinated controls became infected with FeLV (10 persistently, 2 transiently), only 1 of 18 vaccinated (9 ***FIV*** positive, 9 ***FIV*** negative) cats had persistent and 2 of 18 had transient viremia. From these data and other observations, 2 conclusions were drawn: In the early phase of ***FIV*** infection, the immune system is not depressed appreciably, and therefore, cats may be successfully immunized; a recombinant FeLV ***vaccine*** was efficacious in protecting cats against intraperitoneal challenge exposure with FeLV.

ANSWER 13 OF 20 COPYRIGHT 1993 NLM
92193095 MEDLINE
Toward vaccination against feline leukemia virus and ***feline*** ***immunodeficiency*** ***virus*** infections.
Osterhaus AD; Weijer K; Siebelink KH; Rimmelzwaan GF; Bosch ML
Laboratory of Immunobiology, National Institute of Public Health and Environmental Protection, Bilthoven, The Netherlands.)
J Am Vet Med Assoc, (1991 Nov 15) 199 (10) 1443-6
Journal code: HAV ISSN: 0003-1488
United States (Z1.107.567.875.)
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals
9206

ANSWER 14 OF 20 COPYRIGHT 1993 NLM
92193062 MEDLINE
Panel report on the colloquium on feline leukemia virus/ ***feline*** ***immunodeficiency*** ***virus*** : tests and vaccination.
Anonymous
J Am Vet Med Assoc, (1991 Nov 15) 199 (10) 1273-7
Journal code: HAV ISSN: 0003-1488
United States (Z1.107.567.875.)
(GUIDELINE)
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals
9206

ANSWER 15 OF 20 COPYRIGHT 1993 NLM
92193061 MEDLINE
Colloquium on feline leukemia virus/ ***feline*** ***immunodeficiency*** ***virus*** : tests and vaccination.
Orlando, Florida, March 1-3, 1991.
Anonymous
J Am Vet Med Assoc, (1991 Nov 15) 199 (10) 1271-485
Journal code: HAV ISSN: 0003-1488
United States (Z1.107.567.875.)
Conference; (CONGRESS)
(OVERALL)
English
Priority Journals
9206

ANSWER 16 OF 20 COPYRIGHT 1993 NLM
92102767 MEDLINE
Experimental ***vaccine*** protection against ***feline*** ***immunodeficiency*** ***virus*** .
Yamamoto JK; Okuda T; Ackley CD; Louie H; Pembroke E; Zochlinski H; Munn RJ; Gardner MB
Department of Medicine, School of Veterinary Medicine, University of California, Davis 95616.)
AIDS Res Hum Retroviruses, (1991 Nov) 7 (11) 911-22
Journal code: ART ISSN: 0889-2229
United States (Z1.107.567.875.)
Journal; Article; (JOURNAL ARTICLE)
English
Priority Journals
9204
Infection of domestic cats with the ***feline*** ***immunodeficiency*** ***virus*** (***FIV***) represents an important veterinary health problem and a useful animal model for the development of vacci against acquired immunod iciency syndrome (AIDS). Two experimental ***FIV*** vacc es have been developed: one consisting of fixed infected cells (

17, the other of inactivated whole virus (***vaccine*** 2). After 4-6 immunizations over 2-5 months, both vaccines induced a strong ***FIV*** -specific immune response including neutralizing antibody and T-cell proliferation. ***Vaccine*** 1 protected 6 of 9 and ***Vaccine*** 2 protected 5 of 6 recipient cats against any detectable infection with a low dose (10 animal ID50) of ***FIV*** given intraperitoneally 2 weeks after the final boost. One additional cat in each ***vaccine*** group had a transient infection at 5-7 weeks postchallenge following which virus could no longer be detected. Thus, a total of 13 of 15 vaccinated cats were protected against persistent infection. By contrast, 13 of 13 controls were persistently infected by this challenge. The infected cell ***vaccine*** failed to protect against a higher dose (5 x 10(4) ID50) of ***FIV*** . These results indicate that ***vaccine*** prophylaxis against natural ***FIV*** infection should be achievable and enhance optimism of the prospect of developing an effective AIDS ***vaccine*** for humans.

L5 ANSWER 17 OF 20 COPYRIGHT 1993 NLM
AN 92060968 MEDLINE
TI Simian and feline immunodeficiency viruses: animal lentivirus models for evaluation of AIDS vaccines and antiviral agents.
AU Gardner MB
CS Department of Medical Pathology, University of California, Davis 95616.)
SO Antiviral Res, (1991 May) 15 (4) 267-86 Ref: 82
Journal code: 6I7 ISSN: 0166-3542
CY Netherlands (Z1.542.651.)
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 9202
AB Infection of captive macaques with simian immunodeficiency virus (SIV) and domestic cats with ***feline*** ***immunodeficiency*** ***virus*** (***FIV***), both discovered in the last five years, represent excellent animal models for infection of humans with the human immunodeficiency virus (HIV). Protection against challenge infection and protection against development of simian and feline acquired immunodeficiency syndrome has been achieved in each model by use of inactivated whole virus or virus-cell vaccines. A recombinant SIV envelope peptide ***vaccine*** has also proved efficacious. These vaccines have protected against 10-100 animal infectious doses of the homologous cell-free virus given systemically, and, in the simian model, apparently show cross protection against a heterologous strain of SIV. Protected animals appear free of any latent infection although late breakthroughs of infection in a few animals imply that not all vaccinated animals are completely protected. The mechanism of protection in the simian model apparently involves envelope antibody but the role of neutralizing antibody remains unclear. Questions remaining to be answered in both SIV and ***FIV*** models are: (1) the duration of immunity, (2) the extent of protection against heterologous strains and mucosal infection, (3) protection against infection with cell-associated virus and (4) the role, if any, of cellular immunity in ***vaccine*** protection. Initial attempts at post-infection immunotherapy with SIV vaccines have not yet been successful. The inactivated whole SIV and ***FIV*** vaccines offer a promising start and provide hope that a prophylactic AIDS ***vaccine*** will be developed. Use of these animal models for antiviral therapy is just now getting underway. Both models should prove especially useful for studies of prophylaxis and therapy, especially during the early stages of infection and for investigations on drug pharmacokinetics or toxicity that can not be done as well in HIV-infected humans. The animals will also be ideal

for testing the pathogenicity of drug-induced mutant forms of SIV and ***FIV*** . For these purposes it will be necessary to create self-sustaining specific pathogen-free macaque and cat breeding colonies and provide increased housing facilities for infected animals. The future of AIDS research is crucially dependent on the long term availability of these animal models.

L5 ANSWER 18 OF 20 COPYRIGHT 1993 NLM
AN 92040813 MEDLINE
TI Development of IL-2-independent feline lymphoid cell lines chronically infected with ***feline*** ***immunodeficiency*** ***virus*** : importance for diagnostic reagents and vaccines.
AU Yamamoto JK; Ackley CD; Zochlinski H; Louie H; Pembroke E; Torten M; Hansen H; Munn R; Okuda T
CS Department of Medicine, MS-1A, School of Veterinary Medicine, University of California, Davis 95616.
NC CA-39016 (NCI)
CA-16673 (NCI)
AI-27290 (NIAID)
SO Intervirology, (1991) 32 (6) 361-75
Journal code: GW7 ISSN: 0300-5526
CY Switzerland (Z1.542.883.)
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 9202
AB Two interleukin 2 (IL-2)-independent ***feline*** ***immunodeficiency*** ***virus*** (***FIV***) producer cell lines (FL-4 and FL-6) were produced by selecting cells from an IL-2-dependent culture of mixed peripheral blood lymphocytes infected with ***FIV*** . The new cell lines have been stable for over 1 year and spontaneously produce ***FIV*** with an average reverse transcriptase titer of 300,000 cpm/ml and an average sucrose gradient purified viral protein concentration of 1 mg/l. ***FIV*** produced from these cultures is highly infectious in vitro and in vivo. The FL-6 cell line was phenotyped as expressing the feline CD8 and Pan-T antigens, while the FL-4 cell line expressed the CD4, CD8, and Pan-T antigens. Both cell lines, however, express high levels of viral core and envelope proteins. Paraformaldehyde-inactivated whole virus and similarly inactivated whole-cell virus preparations induced a strong antibody response to core and envelope antigens in immunized cats. The establishment of ***FIV*** -producing feline IL-2-independent peripheral blood lymphocyte lines should be valuable for the development of ***FIV*** -diagnostic reagents and vaccines and also as a model for human acquired immunodeficiency syndrome ***vaccine*** development.

OAD 8-10

-useful for 103 rejection but can't do 103 since PTO priority back to 8-26-87

-need 102 (as was Garretta)

L5 ANSWER 19 OF 20 COPYRIGHT 1993 NLM
AN 90245423 MEDLINE
TI [Primates as a model for the study of lentiviruses and AIDS] Les primates comme mod'eles d'etude des lentivirus et du SIDA.
AU Dormont D
CS Laboratoire de Neuropathologie Experimentale et Neurovirologie, Centre de Recherches, Fontenay-Aux-Roses, France.)
SO Pathol Biol (Paris), (1990 Mar) 38 (3) 182-8 Ref: 33
Journal code: OSG ISSN: 0369-8114
CY France (Z1.542.286.)
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA French
FS Priority Journals
EM 9008
AB Neither ***vaccine*** or therapy are, to date, available against human HIV infections. Because few is known on human pathogenesis, a standardized animal model is urgently required. Today, [illegible]

have been available: 1) "partial models" of the human infection (murine retrovirus, infection of SCID or transgenic mice with HIV, sheep infection with Visna, rabbits infect... with HIV1, etc.). These models cannot be used in testing ***vaccine*** strategies, but may help in evaluating some particular stages of the pathogenesis of the disease, and the targets of antiretroviral drugs. 2) Disease models, such as cats infected with ***FIV*** , and, above, primates infected with HIV or SIV (SIV infected macaques, and, perhaps, HIV2 rhesus monkeys). Primate models are the only possibility to day in testing ***vaccine*** procedures before screening among a large population of seronegative humans, and determining drug combination which might be useful in HIV specific therapy. The best primate model is today the SIVMAC251 infected rhesus monkey model, which standardization is now on progress.

5 ANSWER 20 OF 20 COPYRIGHT 1993 NLM
N 89184644 MEDLINE
I Molecular cloning of ***feline*** ***immunodeficiency*** ***virus*** .
J Olmsted RA; Barnes AK; Yamamoto JK; Hirsch VM; Purcell RH; Johnson PR
3 Department of Microbiology, Georgetown University, Rockville, MD 20852.)
J Proc Natl Acad Sci U S A, (1989 Apr) 86 (7) 2448-52
Journal code: PV3 ISSN: 0027-8424
/ United States (Z1.107.567.875.)
[Journal; Article; (JOURNAL ARTICLE)
4 English
3 Priority Journals; Cancer Journals
3 EMBL-J04541; GENBANK-J04541
1 8907
) ***Feline*** ***immunodeficiency*** ***virus*** (***FIV***) is a T-lymphotropic retrovirus associated with immunodeficiency and opportunistic infections in cats. The discovery of ***FIV*** provides an opportunity for the development of a small animal model for AIDS. To initiate the molecular and biological characterization of ***FIV*** , cDNA clones were synthesized and used to isolate a proviral clone of ***FIV*** . Molecular cross-hybridization analysis of ***FIV*** with five lentiviruses revealed that nucleotide-sequence similarities exist between ***FIV*** and these lentiviruses in the gag-pol genes. However, nucleotide-sequence similarities were not seen upon comparison of the ***FIV*** long terminal repeat sequence with known viral sequences. Common antigenic determinants appeared to be shared by ***FIV*** , caprine arthritis encephalitis virus, and visna virus as shown by serological cross-reactivity of rabbit antibodies to caprine arthritis encephalitis virus and visna virus with the putative ***FIV*** core protein p28. These studies demonstrated that ***FIV*** is a member of the lentivirus subfamily and is distantly related to the AIDS lentiviruses of primates. Importantly, progeny virions of our molecular clone were infectious for experimentally inoculated cats. The availability of an infectious molecular clone will make possible a detailed dissection of the molecular pathogenesis of ***FIV*** , which may facilitate the development of ***vaccine*** and therapeutic strategies for AIDS.

logoff
. L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
3OFF? (Y)/N/HOLD:

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          578 FELINE
       362985 T
          241 LYMPHOTROPIC
           41 LENTIVIRUS
L4          5 FELINE T LYMPHOTROPIC LENTIVIRUS
                (FELINE(W)T(W)LYMPHOTROPIC(W)LENTIVIRUS)

=> s 12 or 13 or 14
L5         10 L2 OR L3 OR L4

=> d ti,1-10

US PAT NO:      5,219,725 [IMAGE AVAILABLE]              L5: 1 of 10
TITLE:          Monoclonal antibodies to  feline  -  T  -  lymphotropic
                   lentivirus

US PAT NO:      5,177,083 [IMAGE AVAILABLE]              L5: 2 of 10
TITLE:          Drugs effective against retroviruses

US PAT NO:      5,177,014 [IMAGE AVAILABLE]              L5: 3 of 10
TITLE:          Monoclonal antibodies to  feline  -  T  -  lymphotropic
                   lentivirus

US PAT NO:      5,162,538 [IMAGE AVAILABLE]              L5: 4 of 10
TITLE:          Antiviral new peptides

US PAT NO:      5,147,865 [IMAGE AVAILABLE]              L5: 5 of 10
TITLE:          Phosphonopyrrolidine- and piperidine-containing
                  pseudopeptides of the statin type, a process for their
                  preparation and their use as medicaments against
                  retroviruses

US PAT NO:      5,145,951 [IMAGE AVAILABLE]              L5: 6 of 10
TITLE:          Peptides retroviral protease inhibitors comprising
                  2-amino-2-methylpropionic acid

US PAT NO:      5,126,238 [IMAGE AVAILABLE]              L5: 7 of 10
TITLE:          Hollow fiber cell propagation system and method

US PAT NO:      5,118,602 [IMAGE AVAILABLE]              L5: 8 of 10
TITLE:           Feline   T  -  lymphotropic   lentivirus  assay

US PAT NO:      5,112,756 [IMAGE AVAILABLE]              L5: 9 of 10
TITLE:          Continuous production of bovine Maedi-Visna-like viral
                  antigens in Cf2Th cells

US PAT NO:      5,037,753 [IMAGE AVAILABLE]              L5: 10 of 10
TITLE:           Feline   t  -  lymphotropic   lentivirus

=> d cit,ab,1,3,4,8,10

1.  5,219,725, Jun. 15, 1993, Monoclonal antibodies to
 feline  -  T  -  lymphotropic   lentivirus  ; Thomas P. O'Connor, et
al., 435/5; 436/548; 530/388.35 [IMAGE AVAILABLE]

US PAT NO:      5,219,725 [IMAGE AVAILABLE]              L5: 1 of 10

ABSTRACT:
Monoclonal antibodies specific for an epitope of an FIV-encoded antigen.

3.  5,177,014, Jan. 5, 1993, Monoclonal antibodies to
 feline  -  T  -  lymphotropic   lentivirus  ; Thomas P. O'Connor, et
al., 435/188, 5, 7.92; 530/388.5, 391.3 [IMAGE AVAILABLE]

US PAT NO:      5,177,014 [IMAGE AVAILABLE]              L5: 3 of 10
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APS 8-9-93